## ***Aster jessicae*** Piper

Jessica's aster
Asteraceae (Aster Family)

**Status:** State Endangered, USFWS Species of Concern
**Rank:** G2S1S2

**General Description:** Robust, erect, perennial herb with thick creeping rhizomes that tends to grow in large clumps. Plants grow to be 5 feet tall, but average about 3 feet. The herbage, particularly the upper portion, is covered with a dense, uniform, soft pubescence. Leaves are abundant, broadly lance-shaped and entire. Middle stem leaves generally partially clasp the stem and lower leaves tend to dry up and wither as the season progresses. Flowers are generally numerous, lavender in color, 1-1.5 inches in diameter, and form a broad cluster at the top of the plant.

**Identification Tips:** *A. jessicae* is distinct in its unusually robust nature, dense pubescence, and cordate leaf bases. The only other aster found in the vicinity of Jessica's aster is *A. occidentalis* var. *intermedius*. This species generally inhabits more mesic microhabitats, has smaller flowers, is less robust, possesses few to no hairs, and lacks cordate leaf bases.

**Phenology:** Flowering occurs in late summer and early fall (from late July through mid September). Fruit and seed maturation occurs in September and early October, with seed dispersal likely in mid to late October.

**Range:** Local endemic; southeastern WA (Whitman Co.) and adjacent ID. Occurs in the Columbia Basin physiographic province.

**Habitat:** The species occurs in Palouse grasslands and prairie/ forest transition zones, often in association with small drainages, but above water level on dry ground, 2500-2800 feet in elevation. It occurs primarily in the following habitat types (Daubenmire 1970): ponderosa pine/snowberry, Idaho fescue/snowberry, black hawthorn/snowberry, Idaho fescue/Nootka rosa, and Douglas fir/ ninebark. Other associated species include bluebunch wheat-grass, balsamroot, and yarrow.

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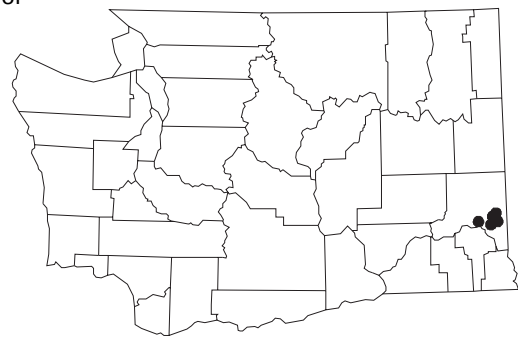
Known distribution of *Aster jessicae* in Washington



● Current (1980+)
○ Historic (older than 1980)

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Reid Schuller

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1997 Produced as part of a cooperative project between the Washington Department of Natural Resources, Washington Natural Heritage Program, and the U.S.D.I. Bureau of Land Management. Persons needing this information in an alternate format may call (360)902-1340 or TTY (360)902-1125.

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**Ecology:** Jessica's aster can tolerate a fair amount of natural or human-caused disturbance, as evidenced by the condition of many sites. Its rhizomatous habit enables it to hold its own, at least for the short term, against many weeds, but seedling establishment and population size may be affected. It is assumed that insects are the primary pollinators. Pollinator availability may be affected by loss of habitat and land use practices, such as pesticide application. The species' response to fire is unknown.

**State Status Comments:** The species' small range, loss of habitat over the years, and the few number of populations are the main factors contributing to its status.

**Inventory Needs:** Remnant patches of native Palouse prairie and adjacent transition zones should continue to be inventoried for Jessica's aster. Small populations could easily go undetected.

**Threats and Management Concerns:** The conversion of much of the Palouse to agriculture is presumably responsible for the decline of this species. The small remnant populations continue to be threatened by chemical sprays, road construction and maintenance, grazing, and invasion of exotic weeds. The physical integrity of all remaining sites should be maintained.

**References:**

Hitchcock, C.L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1955. *Vascular Plants of the Pacific Northwest, Part 5: Compositae*. University of Washington Press, Seattle. 343 pp.

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